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Dendrophlebia (*Agaricomycetes*), a new corticioid genus from India

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Abstract – A new corticioid genus, *Dendrophlebia*, is described from West Kameng in Arunachal Pradesh.

Key words – Eastern Himalaya, Bomdila, angiosperm host

While conducting a fungal foray in Bomdila in West Kameng of Arunachal Pradesh, India, Dhingra made a collection from a decaying angiospermous stump. On the basis of macroscopic and microscopic characters it was compared to similar genera within *Corticiaceae* s.l. (Rattan, 1977, Eriksson et al. 1981, Hjortstam et al. 1987, Dhingra 2005) but could not be assigned to any already known, hence the description of a new genus.

Dendrophlebia Dhingra & Priyanka, **gen. nov.**

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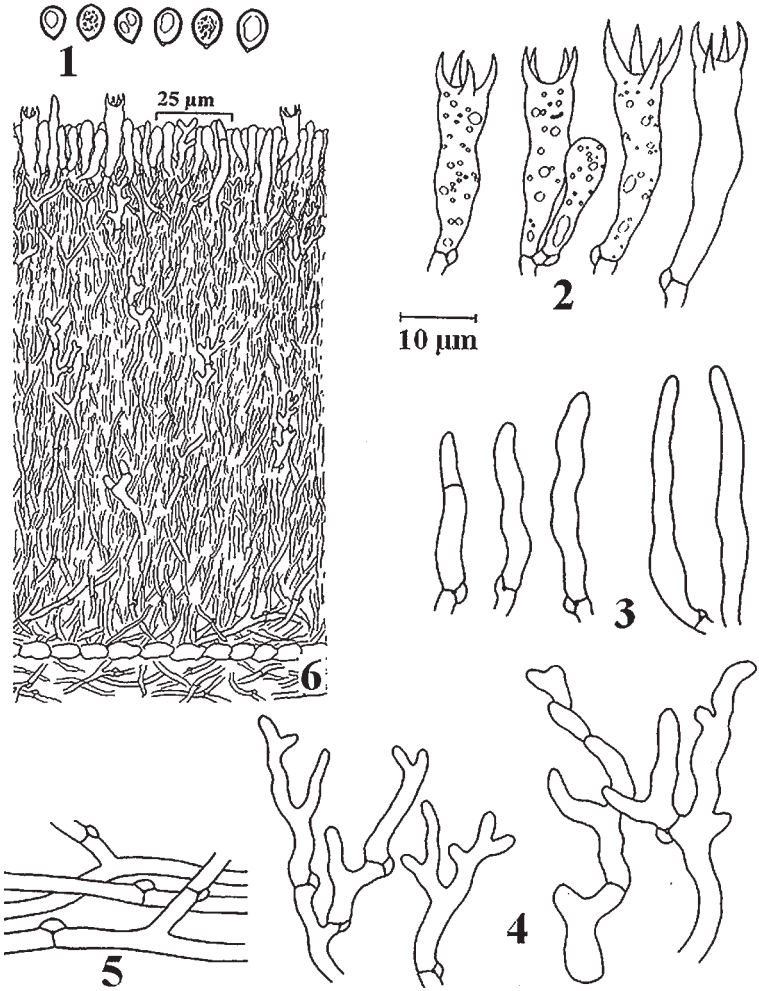
Basidiocarpum resupinatum, adnatum, effusum, ceraceum; hymenium laevigatum, continuum, flavum ad subfuscum, vinaceum in 3% KOH; systema hyphale monomiticum; hyphae generatoriae, fibulatae; dendrophysis adsunt; cystidia hyphoidae, tenuitunicata; basidia clavata, 4-sterigmatibus; basidiosporae ellipsoides, leves, crassitunicatae, inamyloidee, acyanophilee.

Type Species: *Dendrophlebia crassispora* Dhingra & Priyanka

Etymology: The name of the genus is based on the presence of dendrohyphidia in addition to the characters of the genus *Phlebia*.

Basidiocarp resupinate, closely adnate, effused, ceraceous; hymenial surface smooth, continuous, yellowish to brownish, turning dark-ruby on putting a drop of 3% KOH solution; margins not differentiated. Hyphal system monomitic; generative hyphae branched, septate, clamped; hyphae often agglutinated, penetrating deep into the substratum, covered by some yellowish-brown



Figs 1–6. *Dendrophlebia crassispora*: microscopic structures.
1. basidiospores; 2. basidia; 3. cystidia; 4. dendrohyphidia; 5. generative hyphae; 6. vertical section through basidiocarp.

crystalline matter. Dendrohyphidia present. Cystidia thin-walled, hyphoid. Basidia clavate to subclavate, 4-sterigmate, with a basal clamp. Basidiospores ellipsoid, smooth, with thickened walls, inamyloid, acyanophilous.

Remarks—*Dendrophlebia* resembles genus *Phlebia* in having a compact texture, clavate basidia, clamped generative hyphae, and 4-sterigmate basidia.

However, the presence of dendrohyphidia and basidiospores with distinctly thickened walls distinguish this genus from *Phlebia*. The colour change to red after addition of KOH is also found in some *Phlebia* species, as well as among representatives of other genera. A sample was sent to Prof. Nils Hallenberg, who also supported the concept of the new genus.

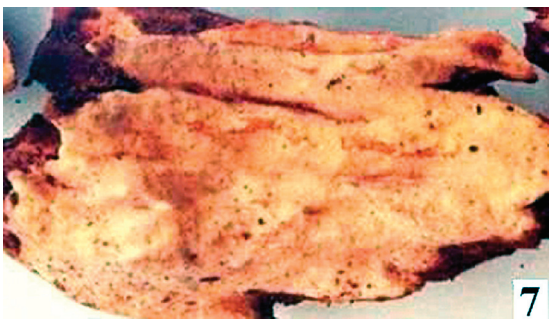


Fig. 7. *Dendrophlebia crassispora*: basidiocarp showing hymenial surface.

Dendrophlebia crassispora Dhingra & Priyanka, **sp. nov.** Figs 1–7

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Basidiocarpum resupinatum, adnatum, effusum, ceraceum, ad 0.7 mm crassum; hymenium laevigatum, continuum, maydi-flavum ad ranunculinum, in sicco subfuscum vinaceum ad purpureum in 3% KOH; margine indeterminato;systema hyphale monomiticum; hyphae generatoriae ad 2.5 µm latae, fibulatae; dendrophysis irregulariter ramosae, tenuitunicatae, in contexto et in hymenio adsunt; cystidia 22.5–35 × 3–4 µm, hyphoidae, sinuosa, tenuitunicata; basidia 20–32.5 × 5–6.5 µm, clavata ad subclavata, vel sinuosa, 4-sterigmatibus; basidiosporae 4.5–5.5 × 3–4 µm, ellipsoides ad late ellipsoides vel ovatae, leves, crassitunicatae, inamyloides, acyanophiles, multiguttatae.

Type: India, Arunachal Pradesh: West Kameng, Bombila, on a decaying angiospermous stump, Dhingra 19726 (PAN, **holotype**), August 26, 1981.

Etymology: The epithet refers to the thick-walled spores.

Basidiocarp resupinate, closely adnate, effused, up to 0.7 mm thick in section, ceraceous; hymenial surface smooth, continuous, butter-yellow to corn-yellow or buttercup yellow, somewhat darkening on drying, turning dark-ruby on putting a drop of 3% KOH solution; margins not differentiated. Hyphal system monomitic; generative hyphae up to 2.5 µm wide, branched, septate, clamped; basal zone and subhymenium not differentiated from each other composed of compactly packed to agglutinated hyphae and dendrohyphidia, covered by yellowish-brown crystalline matter, hyphae penetrate deep into the substrate. Dendrohyphidia richly and irregularly branched, thin-walled, present both in context and hymenium. Cystidia 22.5–35 × 3–4 µm, hyphoid

to somewhat subulate, often sinuous, thin-walled, with a basal clamp, negative to sulphovanillin. Basidia 20–32.5 × 5–6.5 µm, clavate to subclavate, often constricted or somewhat sinuous, 4-sterigmate, with a basal clamp; sterigmata up to 10 µm long. Basidiospores 4.5–5.5 × 3–4 µm, ellipsoid to broadly ellipsoid or ovate, tapering towards the base, smooth, somewhat thick-walled, inamyloid, acyanophilous, with one to many oil drops.

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